

AMENDMENT UNDER 37 C.F.R. § 1.111
U. S. Application No. 10/795,991

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

36. (currently amended): A computer readable medium having program codes executable by a computer to perform a method for describing texture features of an image, the method comprising:

- (a) generating a regularity indicator indicating regularity of the image;
- (b) generating a direction indicator indicating direction of the image;
- (c) generating a scale indicator indicating scale of the texture element of the image; and
- (d) expressing a texture descriptor of the image using the regularity indicator, the direction indicator and the scale indicator[.];

wherein the regularity of the image is expressed as one of values, "irregular," "slightly irregular," "regular" and "highly regular."

37. (previously presented): The computer readable medium of claim 36, wherein the regularity of the image is expressed as one of a plurality of predetermined values.

38. (canceled).

39. (previously presented): The computer readable medium of claim 36, wherein the regularity indicator comprises a quantized integer.

40. (previously presented): The computer readable medium of claim 36, wherein the direction of the image is expressed as one of a plurality of predetermined values.

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41. (previously presented): The computer readable medium of claim 36, wherein the direction of the image is expressed as one of values, "no directionality," "0 degree," "30 degree," "60 degree," "90 degree," "120 degree," and "150 degree."

42. (previously presented): The computer readable medium of claim 36, wherein the direction indicator comprises a quantized integer.

43. (previously presented): The computer readable medium of claim 36, wherein, the scale of the texture element is expressed as one of a plurality of predetermined values.

44. (previously presented): The computer readable medium of claim 36, wherein the scale of the texture element is expressed as one of values, "fine," "medium," "coarse," and "very coarse."

45. (previously presented): The computer readable medium of claim 36, wherein the scale indicator comprises a quantized integer.

46. (previously presented): The computer readable medium of claim 36, wherein the texture descriptor of the image is expressed as a vector of the regular indicator, the direction indicator, and the scale indicator.

47. (previously presented): The computer readable medium of claim 36, wherein the direction indicator comprises a dominant direction of the image.

48. (previously presented): The computer readable medium of claim 47, wherein the scale indicator comprises a scale corresponding to the dominant direction of the image.

49. (previously presented): The computer readable medium of claim 48, wherein the direction indicator comprises a first direction indicator and a second direction indicator

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comprising a first dominant direction of the image and a second dominant direction of the image, respectively.

50. (previously presented): The computer readable medium of claim 49, wherein the scale indicator comprises a first scale indicator comprising a scale corresponding to the first dominant direction of the image and a second scale indicator comprising a scale corresponding to the second dominant direction of the image.

51. (previously presented): The computer readable medium of claim 50, wherein the texture descriptor of the image comprises a vector of the regularity indicator, the first direction indicator, the second direction indicator, the first scale indicator, and the second scale indicator.

52. (currently amended): An apparatus for describing texture features of an image, comprising:

a generating unit to generate a regularity indicator indicating regularity of the image, a direction indicator indicating direction of the image, and a scale indicator indicating scale of a texture element of the image; and

an expressing unit to express a texture descriptor of the image using the regularity indicator, the direction indicator and the scale indicator[. . .];

wherein the regularity indicator expresses the regularity of the image as one of values, "irregular," "slightly irregular," "regular" and "highly regular."

53. (previously presented): The apparatus of claim 52, wherein the regularity indicator expresses the regularity of the image as one of a plurality of predetermined values.

54. (canceled).

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55. (previously presented): The apparatus of claim 52, wherein the regularity indicator comprises a quantized integer.

56. (previously presented): The apparatus of claim 52, wherein the direction indicator expresses the direction of the image as one of a plurality of predetermined values.

57. (previously presented): The apparatus of claim 52, wherein the direction indicator expresses the direction of the image as one of values, "no directionality," "0 degree," "30 degree," "60 degree," "90 degree," "120 degree," and "150 degree."

58. (previously presented): The apparatus of claim 52, wherein the direction indicator comprises a quantized integer.

59. (previously presented): The apparatus of claim 52, wherein the scale indicator expresses the scale as one of a plurality of predetermined values.

60. (previously presented): The apparatus of claim 52, wherein the scale indicator expresses the scale as one of values, "fine," "medium," "coarse," and "very coarse."

61. (previously presented): The apparatus of claim 52, wherein the scale indicator comprises a quantized integer.

62. (previously presented): The apparatus of claim 52, wherein the texture descriptor of the image is expressed as a vector of the regularity indicator, the direction indicator, and the scale indicator.

63. (previously presented): The apparatus of claim 52, wherein the direction indicator comprises a dominant direction of the image.

64. (previously presented): The apparatus of claim 52, wherein the scale indicator comprises a scale corresponding to the dominant direction of the image.

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65. (previously presented): The apparatus of claim 52, wherein the direction indicator comprises a first direction indicator and a second direction indicator comprising a first dominant direction of the image and a second dominant direction of the image, respectively.

66. (previously presented): The method of claim 65, wherein the scale indicator comprises a first scale indicator comprising a scale corresponding to the first dominant direction of the image and a second scale indicator comprising a scale corresponding to the second dominant direction of the image.